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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/681,054	10/09/2003	Thomas Pels	0764 Div	7348
20676	7590	03/28/2005	EXAMINER	
ALFRED J MANGELS 4729 CORNELL ROAD CINCINNATI, OH 452412433			LEWIS, TISHA D	
			ART UNIT	PAPER NUMBER
			3681	

DATE MAILED: 03/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/681,054	PELS ET AL.
	Examiner TISHA D. LEWIS	Art Unit 3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 44 and 83-106 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 44,83-90,96,97,101,102 and 105 is/are rejected.
- 7) Claim(s) 91-95,98-100,103,104 and 106 is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. 09/905,254.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. ____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: ____

## **DETAILED ACTION**

The following is a first action on the merits of application serial no. 10/681,054 filed on October 9, 2003.

### ***Priority***

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/905,254, filed on July 14, 2001.

### ***Claim Objections***

Claim 96 is objected to because of the following informalities:

-In line 9, "noon" should be changed to --non--. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 83, 87-89, 96, 103 and 104 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

-In line 3 of claims 83, 87 and line 2 of claim 96, since the transmission input shaft was introduced in claim 44 as first and second shafts, this should be the same in this claim instead of just "a transmission input shaft".

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 44, 83-86, 90, 97, 101, 102 and 105 are rejected under 35 U.S.C. 102(b) as being anticipated by DE 19850549A1. This reference discloses a method for operating a gearbox including a drive unit (11) having a drive shaft, a first electrical machine (34 or 35), a first and second transmission input shaft (12 and 13) and a transmission output shaft (25), driving at least one of the two input shafts from the drive unit (i.e., during first gear) for a first period of time (until a shift is commanded by the driver), driving one of the input shafts from the first electrical machine (from first to second gear, column 3, lines 54-55) for a second period of time (until gears and output shaft are synchronized) and driving the first electrical machine from one of the input shafts (during energy recovery in overrun mode) for a third period of time (until machine is needed as an motor again or generator is at full capacity).

As to claims 83 and 84, this reference discloses the drive unit being an engine with a drive shaft connected with an input shaft by first and second clutches (29 and 30) wherein both clutches can be disengaged, disengaging gears (i.e., 1E or 3E) between the first input shaft (12) and the output shaft (25) in which the first electrical machine (34) is connected to the first shaft, engaging a gear (2E) having a low gear ratio between the second shaft (13) and the output shaft, driving the first shaft from the

electrical machine, engaging the first clutch between the first shaft and drive shaft when the machine reaches a predetermined speed for starting the engine and after the start, engaging the clutch between the drive shaft and second shaft to move the vehicle (both clutches can be engaged for first gear).

As to claims 85 and 86, this reference discloses engaging one of the clutches (29 or 30) to drive the machine by the engine for use as a generator in the energy recovery mode.

As to claim 90, this reference discloses the machine providing additional torque with the engine through the input shafts and gears to the output shaft to drive the wheels (column 5, lines 24-27).

As to claim 97, this reference discloses disengaging clutches (29 and 30) so the machine can drive the wheels through the gears and output shaft (column 5, lines 39-42).

As to claim 101, this reference discloses that during a shift process, a first gear (1E) on the first shaft is connected to the machine, a second gear (2E) having a higher gear ratio than the first gear is on the second shaft and the drive shaft transmitting torque to the machine until the speeds are synchronized for uninterrupted tractive force.

As to claim 102, this reference discloses the output shaft and or driving wheel driving the machine as a generator to produce energy (column 4, lines 60-64).

As to claim 105, this reference discloses the machine transferring torque through the input shaft and gears to the output shaft to drive the wheels.

***Allowable Subject Matter***

Claims 87 (88, 89, 103, 104 depending from claim 87) and 96 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and **to include all of the limitations of the base claim and any intervening claims.**

Claims 91, 92, (93 depending from claim 92), 94, (95 depending from claim 94), 98-100 and (106 depending from claim 94) are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form **including all of the limitations of the base claim and any intervening claims.**

**FACSIMILE TRANSMISSION**

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is **(703) 872-9326 before final and 703-872-9327 after final**. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

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Typed or printed name of person signing this certificate:

\_\_\_\_\_  
\_\_\_\_\_  
(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

-Bowen ('549) and ('370), Reik et al ('705), Hirt et al ('139) and DE 19940288C1.

-Loeffler ('734) is translation of DE reference used in the above rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TISHA D. LEWIS whose telephone number is 703-305-0921. The examiner can normally be reached on M-Thur 8 AM TO 3 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHARLES A. MARMOR can be reached on 703-308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tdl  
March 20, 2005

*Tisha Lewis*  
TISHA LEWIS  
PRIMARY EXAMINER  
AU 3681 3/20/05